U.S. Application No.: 10/585,693

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

(currently amended): A transgenic bird which is obtained as a G1 transgenic

bird or an offspring thereof by: incubating a fertilized avian egg,

a) microinjecting, into the early embryo thereof at a stage except for and after the

blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a

desired protein,

b) allowing the egg to hatch out to thereby obtain a G0 transgenic chimeric bird, and

mating the G0 transgenic chimeric bird with another G0 transgenic chimeric bird or

an offspring thereof or with a wild-type bird,

wherein the replication-deficient retroviral vector is derived from Moloney murine

leukemia virusearly embryo is at least 24 hours after the start of incubation.

2. (canceled).

3. (original): The transgenic bird according to Claim 2

wherein the early embryo is at least 48 hours after the start of incubation.

4. (previously presented): The transgenic bird according to Claim 1

2

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q95455 U.S. Application No.: 10/585,693

wherein the desired protein is an antibody.

(previously presented): The transgenic bird according to Claim 1
 wherein the bird is a chicken or a quail.

## 6. (previously presented): A transgenic bird

which is a G2 transgenic bird or an offspring thereof obtained by mating the G1 transgenic bird according to Claim 1 with a G0 transgenic bird, another G1 transgenic bird or an offspring thereof, or with a wild-type bird.

- (withdrawn): A method for constructing a G1 transgenic bird which comprises incubating a fertilized avian egg,
- a) microinjecting, into the early embryo thereof at a stage except for and after the blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a desired protein,
  - b) allowing the egg to hatch out to thereby obtain a G0 transgenic chimeric bird, and
- mating the G0 transgenic chimeric bird with another G0 transgenic chimeric bird or an offspring thereof or with a wild-type bird.

U.S. Application No.: 10/585,693

(withdrawn): The method for constructing a transgenic bird according to

wherein the early embryo is at least 24 hours after the start of incubation.

(withdrawn): The method for constructing a transgenic bird according to

Claim 8

wherein the early embryo is at least 48 hours after the start of incubation.

 (withdrawn): The method for constructing a transgenic bird according to Claim 7

wherein the desired protein is an antibody.

 (withdrawn): The method for constructing a transgenic bird according to Claim 7

wherein the bird is a chicken or a quail.

 (withdrawn): The method for constructing a transgenic bird according to Claim 7

which comprises microinjecting a replication-deficient retroviral vector having a titer of not lower than  $1 \times 10^7$  cfu/ml.

U.S. Application No.: 10/585,693

13. (withdrawn): The method for constructing a transgenic bird according to

Claim 12

which comprises microinjecting a replication-deficient retroviral vector having a titer of not lower than  $1 \times 10^9$  cfu/ml.

14. (withdrawn): A method for constructing a transgenic bird

which comprises mating the G1 transgenic bird according to Claim 1 with a G0 transgenic bird, another G1 transgenic bird or an offspring thereof or with a wild-type bird to construct a G2 transgenic bird or an offspring thereof.

15. (withdrawn): A method for producing a protein

which comprises extracting a desired protein from somatic cells, blood or eggs from a transgenic bird constructed by the method according to Claim 7.

16. (withdrawn): A method for sorting out a reproductive lineage transgenic chimeric bird

which comprises collecting sperm samples from transgenic birds according to Claim 1 and testing them for the gene in the sperm.

5

U.S. Application No.: 10/585,693

17. (withdrawn): The method for constructing a transgenic bird according to

Claim 7

wherein the replication-deficient retroviral vector is a vector derived from Moloney murine leukemia virus.

18. (withdrawn): The method for constructing a transgenic bird according to Claim 7

wherein the replication-deficient retroviral vector is VSV-G pseudotyped.

 (withdrawn): The method for constructing a transgenic bird according to Claim 7

wherein the replication-deficient retroviral vector contains a non-retrovirus-derived gene.

20. (withdrawn): The method for constructing a transgenic bird according to Claim 19

wherein the non-retrovirus-derived gene is controlled under the chicken  $\beta\mbox{-actin}$  promoter.

U.S. Application No.: 10/585,693

21. (withdrawn): The method for constructing a transgenic bird according to Claim 19

wherein the non-retrovirus-derived gene codes an antibody.

(withdrawn): The method for constructing a transgenic bird according to

wherein the antibody is a chimeric antibody.

23. (withdrawn): The method for constructing a transgenic bird according to Claim 22

wherein the chimeric antibody is scFv-Fc antibody.

- 24. (canceled).
- 25. (currently amended): An egg laid by the transgenic bird according to Claim 1 which contains not lower than 1 mg/400 egg of the desired protein.
  - 26. (currently amended): An egg laid by the transgenic bird according to Claim 1 which contains not lower than 20 mg/400 egg of the desired protein.

Attorney Docket No.: Q95455

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 10/585,693

27. (currently amended): An egg laid by the transgenic bird according to Claim 1 which contains not lower than 100 mg/<del>100 egg</del> of the desired protein.

 (withdrawn): A method for sorting out a reproductive lineage transgenic chimeric bird

which comprises incubating a fertilized avian egg, microinjecting, into the early embryo thereof at a stage except for and after the blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a desired protein and confirming the gene coding for the desired protein in the sperm of the male G0 transgenic bird obtained by hatching.

- 29. (withdrawn): A method for sorting out a transgenic bird which comprises confirming the expression of the desired protein in the blood of the transgenic bird according to Claim 1.
- 30. (withdrawn): A method for sorting out a G0 transgenic chimeric bird which comprises incubating a fertilized avian egg, microinjecting, into the early embryo thereof at a stage except for and after the blastodermic stage just after egg laying, a replication-deficient retroviral vector coding for a desired protein and confirming the expression of the desired protein in the blood of the G0 transgenic bird obtained by hatching.